


February 17, 2012  
Wilmington, Delaware.

  
STARK, U.S. District Judge:

## I. INTRODUCTION

Plaintiff Cooper Notification, Inc. ("Cooper") filed this patent infringement action against Defendants Twitter, Inc. ("Twitter"), Everbridge Inc. ("Everbridge"), and Federal Signal Corp. ("Federal Signal") (collectively, "Defendants"), alleging infringement of United States Patent Number 7,409,428 ("the '428 patent").

Presently before the Court is the matter of claim construction. Briefing on claim construction was completed on August 19, 2011. (D.I. 170; D.I. 171; D.I. 174; D.I. 194; D.I. 195; D.I. 196; D.I. 197) The Court held a *Markman* hearing on September 9, 2011. *See* Claim Construction Hr'g Tr., Sept. 9, 2011 (D.I. 270) (hereinafter "Tr.").

## II. LEGAL STANDARDS

"It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (internal quotation marks omitted). Construing the claims of a patent presents a question of law. *See Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 977-78 (Fed. Cir. 1995), *aff'd*, 517 U.S. 370, 388-90 (1996). "[T]here is no magic formula or catechism for conducting claim construction." *Phillips*, 415 F.3d at 1324. Instead, the court is free to attach the appropriate weight to appropriate sources "in light of the statutes and policies that inform patent law." *Id.*

"[T]he words of a claim are generally given their ordinary and customary meaning . . . [which is] the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Id.* at 1312-13 (internal citations and quotation marks omitted). "[T]he ordinary meaning of a

claim term is its meaning to the ordinary artisan after reading the entire patent.” *Id.* at 1321 (internal quotation marks omitted). The patent specification “is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.” *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996).

While “the claims themselves provide substantial guidance as to the meaning of particular claim terms,” the context of the surrounding words of the claim also must be considered. *Phillips*, 415 F.3d at 1314. Furthermore, “[o]ther claims of the patent in question, both asserted and unasserted, can also be valuable sources of enlightenment . . . [b]ecause claim terms are normally used consistently throughout the patent . . . .” *Id.* (internal citation omitted).

It is likewise true that “[d]ifferences among claims can also be a useful guide . . . . For example, the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim.” *Id.* at 1314-15 (internal citation omitted). This “presumption is especially strong when the limitation in dispute is the only meaningful difference between an independent and dependent claim, and one party is urging that the limitation in the dependent claim should be read into the independent claim.” *SunRace Roots Enter. Co., Ltd. v. SRAM Corp.*, 336 F.3d 1298, 1303 (Fed. Cir. 2003).

It is also possible that “the specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor’s lexicography governs.” *Phillips*, 415 F.3d at 1316. It bears emphasis that “[e]ven when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction.” *Liebel-Flarsheim Co. v.*

*Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004) (internal quotation marks omitted), *aff'd*, 481 F.3d 1371 (Fed. Cir. 2007).

In addition to the specification, a court “should also consider the patent’s prosecution history, if it is in evidence.” *Markman*, 52 F.3d at 980. The prosecution history, which is “intrinsic evidence,” “consists of the complete record of the proceedings before the PTO [Patent and Trademark Office] and includes the prior art cited during the examination of the patent.” *Phillips*, 415 F.3d at 1317. “[T]he prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” *Id.*

A court also may rely on “extrinsic evidence,” which “consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.” *Markman*, 52 F.3d at 980. For instance, technical dictionaries can assist the court in determining the meaning of a term to those of skill in the relevant art because such dictionaries “endeavor to collect the accepted meanings of terms used in various fields of science and technology.” *Phillips*, 415 F.3d at 1318. In addition, expert testimony can be useful “to ensure that the court’s understanding of the technical aspects of the patent is consistent with that of a person of ordinary skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field.” *Id.* Nonetheless, courts must not lose sight of the fact that “expert reports and testimony [are] generated at the time of and for the purpose of litigation and thus can suffer from bias that is not present in intrinsic evidence.” *Id.* Overall, while extrinsic evidence “may be useful” to the court, it is “less reliable” than intrinsic

evidence, and its consideration “is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence.” *Id.* at 1318-19.

Finally, “[t]he construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.”

*Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998). It follows that “a claim interpretation that would exclude the inventor’s device is rarely the correct interpretation.” *Osram GmbH v. Int’l Trade Comm’n*, 505 F.3d 1351, 1358 (Fed. Cir. 2007).

Thus, if possible, claims should be construed to uphold validity. *See In re Yamamoto*, 740 F.2d 1569, 1571 (Fed. Cir. 1984).

### III. DISCUSSION

#### A. “first message”

1. Plaintiff’s Construction: “data in a format suitable for processing by one or more messaging subsystems that contains content from an alert originator”
2. Defendants’ Construction: “alert message sent from alert originator”
3. Court’s Construction: “message that starts the notification process”

During the claim construction hearing, counsel for both sides agreed with the Court’s proposal to construe “first message” to mean “message that starts the notification process.” (*See* Tr. at 27-28, 71-72) The Court therefore will adopt that construction.<sup>1</sup>

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<sup>1</sup>The parties’ originally proposed constructions for the terms “first message,” “gateway message,” and “second message” differed in a common respect, in that Plaintiff’s constructions for those terms used the word “data,” while Defendants’ constructions used the term “message.” During the hearing, Plaintiff’s counsel indicated that it would be acceptable to replace the word “data” in its proposed constructions with the word “message.” (Tr. at 27-28) In view of this agreement, the Court will construe the “first message,” “gateway message,” and “second message” terms using the word “message” instead of “data.”

**B. “gateway message”**

1. Plaintiff’s Construction: “data in a format suitable for processing by one or more communication gateways that contains at least a portion of the content from the alert originator”
2. Defendants’ Construction: “a message associated with a single communications gateway containing the converted first message and information needed for distribution of the second message to a set of user terminals sharing the same internet domain or wireless carrier”
3. Court’s Construction: “message in a format suitable for processing by one or more communication gateways”

The parties’ proposed constructions differ in two respects. First, the parties dispute whether the gateway message *must* contain content from the alert originator, as Plaintiff’s proposed construction would require. Second, the parties dispute whether a gateway message *must* be associated with only a single communications gateway, and, in turn, a single internet domain or wireless carrier, as Defendants’ proposed construction would require. Although various embodiments of the invention *may* include these features, neither feature is strictly required by the intrinsic record, and the Court’s construction therefore imposes neither limitation.

Contrary to Plaintiff’s proposed construction, the gateway message does not require content from the alert originator, as the specification describes embodiments in which the gateway message does not necessarily include such content. For example, the specification indicates that all of the message content may be parsed or stripped from the first message before it is converted to a gateway message. (*See* ’428 patent, col. 11 ll. 4-7) (“[I]n an embodiment, the message engine 301 may parse or strip all or a portion of the header and message content of the first message as received from the alert originator . . . .”) The specification also describes

embodiments in which the notification process is triggered by information recognized or generated by the alert originator, but a predefined message is ultimately retrieved from a database and transmitted as the gateway message. (*Id.* col. 25 ll. 12-33, col. 28 ll. 3-18) In those embodiments, although the gateway message *corresponds* to content from the alert originator, it does not necessarily *include* or contain that content.

The intrinsic record also makes clear that a single gateway message may be transmitted to multiple communication gateways. Independent claim 1 provides that the first message is converted to “one or more” gateway messages, which are then transferred to “*one or more* corresponding communication gateways,” and independent claim 12 similarly provides for the transmission of “at least one gateway message . . . via the *one or more* communication gateways” (emphasis added). The specification also describes an embodiment in which a single gateway message may be transmitted via multiple communication gateways. (*See* ’428 patent, col. 11 ll. 13-19) (describing transmission of “*a* gateway message . . . via *one or more* of the communication gateways”), *id.* col. 13 ll. 59-60 (describing delivery via “gateway message [singular] sent to the communication gateways [plural]”)

Finally, the prosecution history confirms that a single gateway message may be transmitted to multiple communication gateways. During the reexamination proceedings, the patentee distinguished the Zimmers prior art reference by arguing that it “describes an entirely different type of alerting system” than the claimed invention, in part because “Zimmers distributes each alert, one at a time, to each destination rather than utilizing *a* gateway message

to a *plurality* of communication gateways.” (See Joint Claim Construction Chart (“JCCC”), Ex. 5 at 3-4) (emphasis added)<sup>2</sup>

**C. “second message”**

1. Plaintiff’s Construction: “data in a format suitable for delivery to one or more user terminals that contains at least a portion of the content from the alert originator”
2. Defendants’ Construction: “a message to an individual user terminal that corresponds to the first message and that is created from a gateway message”
3. Court’s Construction: “message in a format suitable for delivery to one or more user terminals”

Plaintiff’s proposed construction would require that the second message contains content from the alert originator. Defendants’ proposed construction would require that the second message be delivered to a single individual user terminal, and would further specify that the second message corresponds to the first message and is created from a gateway message.

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<sup>2</sup>Defendants appear to argue that the term “gateway message” must be construed to require the transmission of a single gateway message to a single communications gateway, based on the reexamination prosecution history, during which the patentee allegedly emphasized the claimed invention’s “one to many” functionality to distinguish prior art. (D.I. 171 at 15-18) The Court disagrees with Defendants’ reading of the prosecution history, for two reasons. First, the prosecution history indicates that the patentee distinguished the Zimmers prior art reference based on the complete absence of a gateway message from the Zimmers system, rather than any alleged “one to many” functionality of the gateway message. (See JCCC, Ex. 5 at 3) (distinguishing the claimed invention’s “three-tiered structure” from the Zimmers “two-tier system” due to the claimed invention’s additional use of a gateway message) Second, Plaintiff’s construction (which the Court adopts) remains entirely consistent with the “one to many” functionality noted by Defendants, since a single gateway message may still be delivered to a plurality of user terminals via a single communication gateway.



Because the Court finds that the parties' proposed limitations are either unwarranted or unnecessary, the Court's construction does not include them.<sup>3</sup>

The plain language of the claims indicates that the "second message" may be delivered to one or more user terminals. (*See* '428 patent, claims 1 and 12) (describing distribution of second message to "one or more user terminals" and "at least one user terminal," respectively) The specification also repeatedly describes embodiments in which the second message is distributed to multiple user terminals. (*Id.* col. 10 ll. 10-18, col. 6 l. 66 to col. 7 l. 10, col. 18 ll. 21-27) The prosecution history confirms that the second message may be distributed to multiple users and devices. (JCCC, Ex. 5 at 5-9) Indeed, the "one to many" functionality emphasized by Defendants is consistent with the delivery of the second message to multiple user terminals.<sup>4</sup>

The Court finds it unnecessary to specify that the second message "corresponds to the first message" and is "created from a gateway message." The claim language already makes clear that the second message corresponds to the first message, and the Court finds it unnecessary to import this surrounding claim language into its construction for "second message." The Court likewise finds it unnecessary to specify that the second message is "created from" a gateway message, as the claim language already makes clear that the second message corresponds to its preceding first message and gateway message.

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<sup>3</sup>For the same reasons already explained above in connection with the term "gateway message," the Court concludes that the "second message" does not require content from the alert originator.

<sup>4</sup>During the hearing, Defendants' counsel suggested that the parties may be in agreement that the second message could be distributed to multiple user terminals. (Tr. at 113-14)

**D. “communication gateway”**

1. Plaintiff’s Construction: “a component between one or more messaging subsystems and one or more user terminals”
2. Defendants’ Construction: “an access point for a communication network that provides communication services for a plurality of user terminals”
3. Court’s Construction: “an access point for a communication network that provides communication services for one or more user terminals”

The Court’s construction is supported by the intrinsic record. The claims and specification make clear that the communication gateway receives an incoming gateway message and then distributes the second message to the user terminals. That purpose can only be achieved if the communication gateway connects to the communication network that services the user terminals.

Plaintiff’s construction is inadequate, as it refers only to the communication gateway’s spatial or sequential location relative to other components, but does not clarify its function or purpose within the overall system. Moreover, Plaintiff’s construction defines communication gateway by expressly referencing the term “messaging subsystems;” however, that terminology is only recited in claim 12, and appears nowhere in claim 1. Although Cooper has since withdrawn its assertion of claims 1-11 (D.I. 331), those unasserted claims remain relevant to claim construction, since “a claim term should be construed consistently with its appearance in other places in the same claim or in other claims of the same patent.” *Rexnord Corp. v. Laitram Corp.*, 274 F.3d 1336, 1342 (Fed. Cir. 2001).<sup>5</sup>

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<sup>5</sup>Plaintiff has expressed concern that the term “access point” merely describes one embodiment and would improperly exclude other disclosed embodiments, such as delivery daemons, SMS gateways, and IM gateways. (Tr. at 41; *see also* D.I. 174 at 13 (citing ’428 patent, col. 27 ll. 9-24, *id.* col. 21 ll. 24-44, *id.* col. 23 ll. 20-40)) During the hearing, however, Defendants’ counsel represented that those embodiments would not be excluded as “access points.” (Tr. at 118) In

The Court's construction also clarifies that the communication gateway is coupled to one or more user terminals rather than requiring multiple user terminals, consistent with the claim language. (*See, e.g.*, '428 patent, claims 1 and 12) (describing "one or more user terminals to receive a second message" and "wherein each of the gateways is also coupled to at least one user terminal," respectively)

**E. "message group"**

1. Plaintiff's Construction: "one or more users or user terminals having at least one defining characteristic"
2. Defendants' Construction: "a set of user terminals sharing the same internet domain or wireless carrier or other communications gateway"
3. Court's Construction: "one or more users or user terminals having at least one defining characteristic"

The Court's construction is supported by the intrinsic record, which indicates that a message group may include a set of users or user terminals, and need not share the same internet domain, wireless carrier, or other communications gateway.

The claims and specification indicate that a message group may include both users and user terminals. Claim 1 recites "registered **users** associated with at least one message group," while claim 16 provides for "each of the **user terminals** associated with each message group" (emphasis added). The specification similarly provides that a message group "may include a set of **user terminals**" as well as "registered **users** associated with the at least one message group." (*See* '428 patent, col. 8 ll. 1-9, col. 21 ll. 34-38) (emphasis added)

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view of this representation, the Court's construction does not exclude the various embodiments identified by Plaintiffs.

The Court finds no basis for requiring that a message group share the same internet domain or wireless carrier or other communications gateway. Although the specification does describe a message group as possibly including a set of user terminals that are “accessible using the same Internet domain name” or alternatively, “accessible by a particular network such as, for example, a particular carrier or wireless telecommunications service provider” (*see id.* col. 8 ll. 1-9), those embodiments are described merely as examples, and not the invention as a whole. Indeed, the specification appears to expressly contemplate the use of different carriers or communication networks within the same message group. Specifically, column 11 of the specification describes an embodiment in which a user “can have multiple devices (i.e., multiple user terminals) each having the capability to receive messages,” and further notes that “each user terminal may have e-mail access *to the same or different networks.*” (’428 patent, col. 11 ll. 50-55) (emphasis added) As explained by the inventors, “[t]his diversity provides for redundancy over *different carriers and infrastructures* to increase the probability of successful delivery of a message to *a user.*” (*Id.* col. 11 ll. 54-57) Thus, where a given user is associated with a particular message group, the specification indicates that the user may own multiple devices to receive messages transmitted via different networks, carriers, and infrastructures, etc., such that the redundant transmission of a message maximizes the chances of successful delivery to that user. Limiting the term “message group” to require the same internet domain, wireless carrier, or other communications gateway, therefore, would improperly exclude this disclosed embodiment.

**F. “alert originator”**

1. Plaintiff’s Construction: plain and ordinary meaning
2. Defendants’ Construction: “source of an alert message”
3. Court’s Construction: “source of the first message”

The parties’ main dispute concerns whether the word “alert” requires that the claimed invention be limited to the transmission of “emergency” messages, or whether the invention reaches beyond that narrow context. The parties do not otherwise appear to dispute that the alert originator is the origin or source of the first message.

The Court agrees with Plaintiff that the claimed invention is not narrowly limited to the emergency context. Although the claimed invention certainly is described as useful in such situations, the specification also describes the invention in broader terms, without referencing emergency situations. (*See* ’428 patent, Abstract; *id.* col. 3 ll. 17-22, col. 4 ll. 17-26) Applications of the claimed invention in the emergency context are described as embodiments.

Moreover, although the term “alert” may sometimes imply an emergency, the plain meaning of that term is not so narrowly restricted, as one may be alerted to non-emergency information. Thus, the Court concludes that the alert originator is simply the source of the first message, which may include but is not limited to emergency notifications. *See Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc.*, 334 F.3d 1294, 1301 (Fed. Cir. 2003) (“[T]he fact that the inventor anticipated that the invention may be used in a particular manner does not limit the scope to that narrow context.”).

**G. “reformat”**

1. Plaintiff’s Construction: plain and ordinary meaning
2. Defendants’ Construction: “rearranging the information provided within the first message”
3. Court’s Construction: “rearranging the information provided within the first message, which may include arranging differently, parsing, extracting dissecting, and/or stripping”

The parties’ sole dispute appears to be whether the term “reformat” is limited to rearranging information, or whether it may also include other operations. Because the specification also describes other operations, such as parsing, extracting, dissecting, and stripping information from the first message (*see, e.g.*, ’428 patent, col. 11 ll. 4-8), the Court will include those operations in its construction. This addresses Plaintiff’s concerns, and does not appear to be opposed by Defendants. (Tr. at 53-54, 120-22)

**H. “form an address”**

1. Plaintiff’s Construction: plain and ordinary meaning
2. Defendants’ Construction: “assembling an address by appending separate pieces of information to one another in a single address”
3. Court’s Construction: plain and ordinary meaning

The Court agrees with Plaintiff that this term should receive its plain and ordinary meaning, since there has been no inventor lexicography, disavowal, or disclaimer that would justify a departure from the plain meaning. *See Thorner v. Sony Computer Entertainment Am. LLC*, --F.3d--, 2012 WL 280657, at \*2 (Fed. Cir. 2012). The parties’ dispute appears to involve whether the process of forming an address is limited to the assembly of separate pieces of information into a single address, or whether it may also include the retrieval or recall of a fully formed address already containing the required information. (D.I. 170 at 10-12; D.I. 194 at 5;

D.I. 197 at 9-13; Tr. at 122-24) The Court concludes that the adjacent claim language provides that forming an address only requires the inclusion of domain name *or* user identification information, i.e., one but not both, pieces of information. (See '428 patent, claim 12) ("wherein the first messaging subsystem is configured to form an address . . . to include the domain name information . . . *or* the user identification information") (emphasis added). See also *Kustom Signals, Inc. v. Applied Concepts, Inc.*, 264 F.3d 1326, 1331 (Fed. Cir. 2001); *Bell Atl. Network Servs., Inc. v. Covad Commc'ns Group, Inc.*, 262 F.3d 1258, 1275 (Fed. Cir. 2001) (construing "or" to mean designating alternative possibilities rather than requiring both listed elements).<sup>6</sup>

#### IV. CONCLUSION

For the foregoing reasons, the Court will construe the terms of the '428 patent consistent with this Memorandum Opinion. An appropriate Order follows.

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<sup>6</sup>The precise disagreement among the parties is not entirely clear. On the one hand, Cooper points to the claim language to argue that the inventors' use of the word "or" only requires the inclusion of one, but not both, pieces of address information. (D.I. 197 at 10; Tr. at 56-57) On the other hand, Cooper argues that "form an address" may encompass retrieving a fully formed address that includes both pieces of information, since the specification purportedly describes such embodiments. (D.I. 197 at 10) (citing '428 patent, col. 13 ll. 51-52) Defendants, for their part, oppose each of Plaintiff's arguments.